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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,166	02/09/2007	Juan Ignacio Valdes Edwards	15807.0005USWO	8919

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EXAMINER	
MCCLAIN-COLEMAN, TYNESHA L.	
ART UNIT	**PAPER NUMBER**
1789	
MAIL DATE	**DELIVERY MODE**
10/26/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,166	VALDES EDWARDS, JUAN IGNACIO	
	Examiner	Art Unit	
	TYNESHA MCCLAIN-COLEMAN	1789	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed September 30, 2010 is acknowledged. Claims 1-5 and new claim 6 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 30, 2010 has been entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites the newly added limitation "immediately subjecting the cut meat to an initial quick freeze process." However, no

support has been provided in the specification for this limitation. It is noted that page 6, lines 17-30 and page 7, lines 1-7 of the instant specification indicate the meat pieces are immediately packed under high vacuum, however, there is no indication that the cut meat was immediately subjected to an initial quick freeze process as presently claimed in claimed 1. Accordingly, there is no indication that the applicant had possession of the presently claimed invention at the time of filing the instant application.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation “resistant plastified boxes" in step e. However, this phrase is not known in the art, and no definition has been provided in the specification. Therefore, the scope of the claim is indefinite.

7. Claim 1 also recites the limitation “continuing the quick freezing of step c" in step d. Therefore, the scope of the claim is indefinite as there is no mention of quick freezing in step c of claim 1.

8. Further, the term "basically" in step b renders claim 1 indefinite because it is unclear whether the limitations following the phrase (oxygen, nitrogen, and carbon anhydride) are part of the claimed invention.

9. Claim 3 recites the limitation "step b is carried out using facilities or equipments to produce high vacuum," and this claim depends upon claim 1. However, there is no mention of a vacuum process in step b of claim 1. Therefore, the scope of the claim is indefinite.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Berkowitz* US 2825652 (hereinafter "*Berkowitz*") in view of *Mayr et al.* in "Rapid Detection of Meat Spoilage by Measuring Volatile Organic Compounds by Using Proton Transfer Reaction Mass Spectrometry", August 2003, Applied and Environmental Microbiology-Volume 69-Number 8, Pages 4697-4705 (hereinafter "*Mayr*"), as

evidenced by *Day*, "Chilled Food Packaging, " 2000 (no month), Chilled foods: A comprehensive guide, Second Edition, page 145 (hereinafter "*Day*"), and *International Trade Centre*, "Health, Safety, and Environmental Considerations in the Export Packaging of Fish and Marine Products," January 1999, Export Packaging, No. 44, p 1-28 (hereinafter "*International Trade Centre*"). *Day* is merely used to show the properties of the packaging material disclosed by *Mayr.*

13. With respect to claims 1-6, *Berkowitz* discloses a method of freezing meats which comprises initially freezing trimmed meat (column 2, lines 66-69; column 3, lines 68-69; and column 4, lines 14-15) rapidly within a limited amount of time, such as forty minutes (column 4, lines 34-37; and claim 5), leaving the interior of the meat only lightly frozen (step a) (column 2, lines 19-20). The meat is then rapidly packaged in an envelope of shrinkable film material (step b) (column 2, lines 33-34). The packaging material is impervious to air, moisture, and external odors, and its shrinkage reduces the voids at the surface (step b) (claims 2 and 4) (column 2, lines 47-49). Also, *Berkowitz* teaches the packing material is exposed to a wide range of temperatures, endures sealing, and is resistant to physical stresses as claimed by the applicant (step b and claim 4) (column 3, lines 24-25, 39-41, and 48-51). The envelope of shrinkable film is evacuated to remove air and suitably sealed to hold the vacuum (step c) (column 2, lines 33-42). The packaging film is connected with a high-vacuum pump and the air is withdrawn from the bag (step c) (column 3, lines 18-20). This procedure is accomplished rapidly and the frozen condition of the meat has not changed to a material extent (step e) (column 3, lines 25-27). Thereafter the meat in the sealed

package is subjected to a rapid deep freezing action, which preserves the meat (column 2, lines 52-55). The meat product may be stored and later prepared for consumption (step e and f) (column 1, lines 63-65).

14. *Berkowitz* is silent with respect to taking the frozen, packaged meat products out of the freezer and subjecting it to defrosting and the product is ready to be consumed in 1 to 3 days. Given that *Berkowitz* teaches the meat product is frozen and later prepared for consumption, and it is well known in the art to defrost frozen meats and consume them within about 3 days in order to avoid spoilage and decrease freshness of the product, *Berkowitz* teaches the limitations of defrosting and consuming the product as claimed by the applicant (letter f).

15. *Berkowitz* is also silent with respect to performing steps a-d in a single facility (claim 5). Given that *Berkowitz* discloses the steps of initial freezing (step a), packaging (step b), vacuuming (step c), and final freezing (step d) are done rapidly and quickly (column 2, lines 33-34 and 52-56) it is expected that the method of freezing meat products as disclosed by *Berkowitz* is performed in one facility, absent any clear and convincing evidence to the contrary.

16. However, *Berkowitz* does not disclose the temperature within the center of the meat is around -5°C after the initial freezing (step a) or around -18°C after the final freezing (step d). Also, *Berkowitz* does not disclose the center of the meat piece reaches around -18°C within 2 hours including packaging time during the final freezing (step d).

17. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to optimize the temperature within the center of the meat disclosed by *Berkowitz* is around -5°C after the initial freezing or around -18°C after the final freezing as claimed by the applicant.

18. One having ordinary skill in the art would have been motivated to do this because *Berkowtiz* discloses the interior of the meat is only lightly frozen during the initial freezing step, and it is well known in the art that temperature of frozen foods must be -12°C or colder temperatures such as -18°C. Therefore, it would have been obvious to optimize the temperature within the center of the meat disclosed by *Berkowitz* is around -5°C after the initial freezing (step a) or around -18°C after the final freezing with the expectation of successfully preparing a frozen meat product.

19. It would have also been obvious to a person of ordinary skill in the art at the time the invention was made to optimize the center of the meat piece reaches around -18°C within 2 hours including packaging time during the final freezing in the process disclosed by *Berkowitz*.

20. One having ordinary skill in the art would have been motivated to do this because *Berkowitz* discloses the final freezing step completely and rapidly freezes the meat, and the intermediate procedure prior to the second stage of freezing is carried on quickly, preferably less than ten minutes (column 4, lines 68-71). Therefore, it would have been obvious to optimize the center of the meat piece disclosed by *Berkowitz* reaches around -18°C within 2 hours including packaging time, as claimed by the applicant, with the expectation of successfully preparing a frozen meat product.

21. *Berkowtiz* also does not disclose the vacuum process comprises a 99% vacuum (step c). Further, *Berkowitz* does not disclose the packaging film permeabilities to gases and water vapor as well as its temperature resistances (claim 3).

22. *Mayr* discloses that meat pieces of beef and pork were vacuum packaged individually in vacuum bagging film (polyamide-polyethylene [Packartis]) (letter b) by evacuating the package (97 to 99% vacuum) (step c) and sealing (page 1, Packaging and Storage). The packaging material used is O_2-impermeable, and the transmission rates of O_2 and CO_2 in the film which are 10 and 35 cm^3 m^{-2} $24h^{-1}$ 10^5 Pa^{-1}, respectively (page 1, Packaging and Storage; and Discussion, 2nd paragraph) which is converted to 10 and 35 cm^3 m^{-2} $24h^{-1}$ bar. As evidenced by *Day*, high oxygen barrier materials with O_2 transmission rates of less than 15 cm^3 m^{-2} day^{-1} atm^{-1} are required when vacuum packaging chilled foods such as meats. Also, packaging materials with low water vapor transmission rates must be used. Typical vacuum packaging materials that have these features consist of coextruded or laminated films such as polyamide-polyethylene (PA/PE) (page 145, Vacuum Packaging (VP), section 6.4.2) (step b and claims 3-4). PA/PE is consistent with the material taught by the prior art and the material disclosed by applicant. Therefore, it is expected that this material has similar low water vapor permeability, low nitrogen permeability, temperature resistance, and sealing temperatures as that recited in the instant claims. Applicant does not appear to process the PA/PE of the instant disclosure to further adjust or improve any characteristics thereof such as water vapor permeability, nitrogen permeability, temperature resistance, and sealing temperatures. *Mayr* teaches PA/PE that is used in the packing of meat

products and it is expected to have similar low water permeability to the PA/PE used in the instant disclosure, absent any clear and convincing evidence to the contrary.

23. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the packaging film disclosed by *Mayr* as the packaging material used in the process disclosed by *Berkowitz*. It would have also been obvious to use the 97% to 99% vacuum as disclosed by *Mayr* in the vacuum process disclosed by *Berkowtiz*.

24. One having ordinary skill in the art would have been motivated to do this because *Berkowitz* discloses the packaging film is impervious to air and moisture, and the film disclosed by *Mayr* is similarly impervious to air and moisture. Also, *Berkowitz* discloses the packaging film is connected with a high-vacuum pump and the air is withdrawn from the bag (step c) (column 3, lines 18-20). Based upon the fact that *Berkowitz* and *Mayr* similarly teach vacuum packaging meat in an air and moisture impervious film, it would have been obvious, given the teachings of *Mayr*, to use the packaging film as well as to use the 97% to 99% vacuum in the process disclosed by *Berkowtiz* with the expectation of successfully preparing a frozen meat product.

25. Further, *Berkowitz* does not disclose the frozen packaged meat products are stored in resistant plastified cardboard boxes (step e), and that the meat products include fish (claim 6).

26. *International Trade Centre* discloses paper and paperboard such as cartons are used in the packaging of frozen shrimp and fishery products for exports (page 16, Paper

and paperboard). The frozen shrimp may be packed in a unit package and further placed in master cartons which may be polyethylene coated (page 22, 1st bullet).

27. It would have been obvious to place the packaged meat product disclosed by *Berkowitz* in the cartons disclosed by *International Trade Centre*.

28. One having ordinary skill in the art would have been motivated to do this because *Berkowitz* teaches the frozen, packaged meat product may be stored (column 1, lines 63-65). Also, *International Trade Centre* discloses the coated packaging is strong and may be used in exports of the product (page 16, Paper and paperboard). Based upon the fact that *Berkowitz* and *International Trade Centre* similarly teach a packaged frozen meat product, it would have been obvious, given the teachings of *International Trade Centre*, to place the packaged meat product disclosed by *Berkowtiz* into the cartons with the expectation of successfully storing a frozen meat product.

29. Further, it would have been obvious to use shrimp and fishery products as disclosed by *International Trade Centre* as the meat products in the method disclosed by *Berkowitz*.

30. One having ordinary skill in the art would have been motivated to do this because *Berkowitz* discloses other types of meat may be used (column 4, line 14). Based upon the fact that *Berkowitz* and *International Trade Centre* similarly teach a frozen product, it would have been obvious, given the teachings of *International Trade Centre*, to use shrimp and fishery products ad the meat product in the method disclosed by *Berkowitz* with the expectation of successfully preparing a frozen product.

Response to Arguments

31. Applicants arguments filed September 30, 2010 have been fully considered.

32. Due to the amendment to claim 1, the rejection of claims 1-4 over *Mitsuda* in view of *Mayr* and claim 5 over *Mitsuda* in view of *Mayr* and *Weerawardena* have been withdrawn. Therefore, applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. As disclosed above, *Berkowitz* in view of *Mayr* and *International Trade Centre* disclose a method preserving meat that is similar to that claimed by the applicant.

33. In response to applicant's arguments, the recitation "preserving meat throughout long periods of time, tens of months" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). However, given that *Berkowitz* in view of *Mayr* and *International Trade Centre* discloses a method of freezing meat that is similar to that claimed by the applicant, the process disclosed by *Berkowitz* in view of *Mayr* and *International Trade Centre* is capable of preserving the properties of a fresh meat product for long periods of time, including tens of months as noted by the applicant (*Berkowitz*: column 1, lines 63-67).

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference *Sørensen*, "Frozen Food Legislation," 2002 (no month), Bulletin of International Institute of Refrigeration, No. 4 teaches the temperature of frozen goods must be -12 or colder (2nd page, Frozen Foods), the temperature of some meat products is sometimes reduced to about -5 during the process (2nd page, Frozen foods), and the temperature of the core of quick-freezing products is -18C (3rd page, IV. Freezing-End Temperature).

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TYNESHA MCCLAIN-COLEMAN whose telephone number is (571)270-1153. The examiner can normally be reached on Monday - Thursday 7:30AM - 5:00PM Eastern Time.

36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571)272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TYNESHA L MCCLAIN-COLEMAN/
Examiner, Art Unit 1789

/Jennifer C McNeil/
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